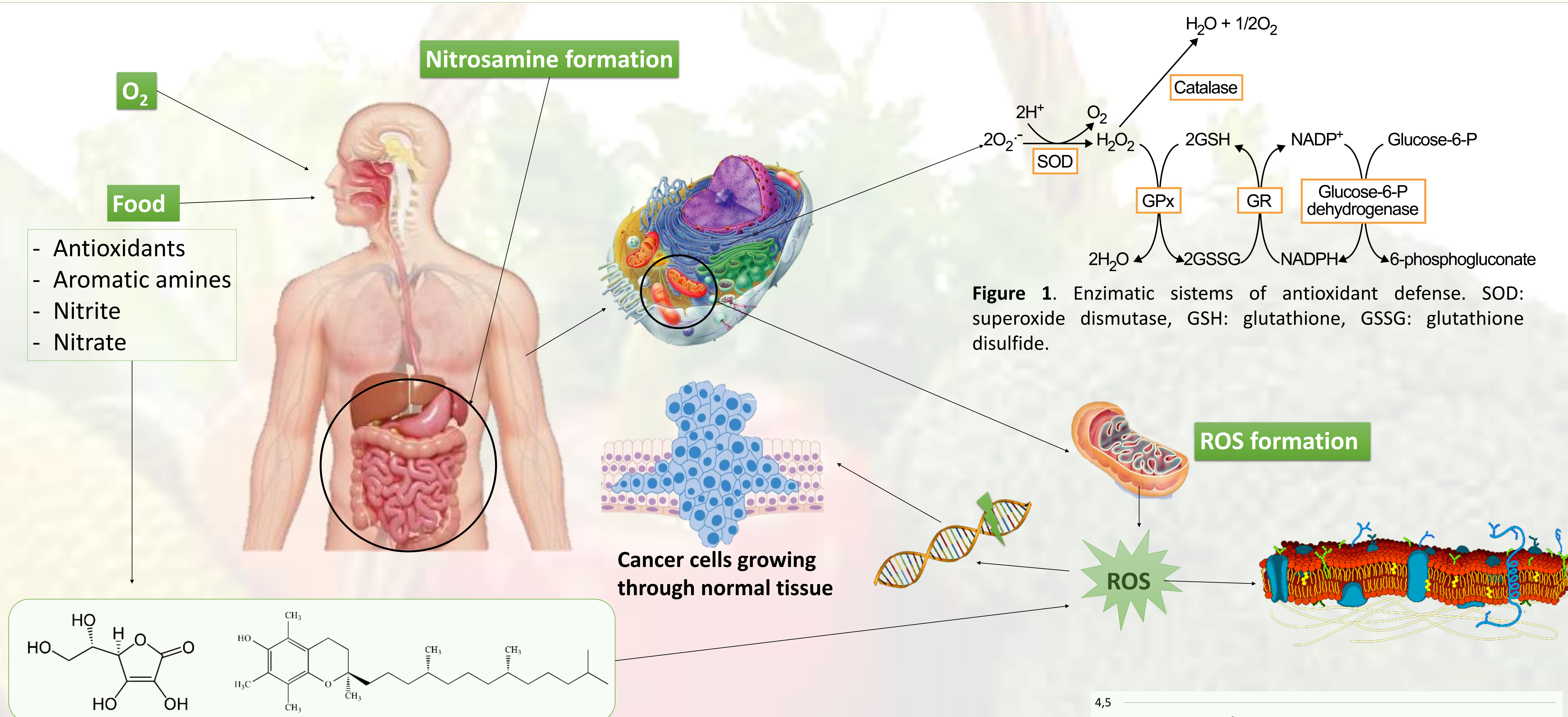


Aims

1. To describe the **antioxidant systems**, that are **found in the cell**, whether they are of **endogenous** or **exogenous origin**.
2. To discover if **antioxidants** are **beneficial** to **prevent cancer**.
3. To analyse whether during the disease **antioxidants** can play a **beneficial** role as an **adjuvant treatment** or not.



Studies carried out with **healthy people**, like one where people consume a **diet rich in flavonoids** showed that the **risk of suffer cancer was less** (Lin et al. 2006). In another study the administration of **vitamins** as a **supplement** in **patients with cancer** had negative results **increasing the mortality** in head and neck cancer (Bairati et al. 2006).

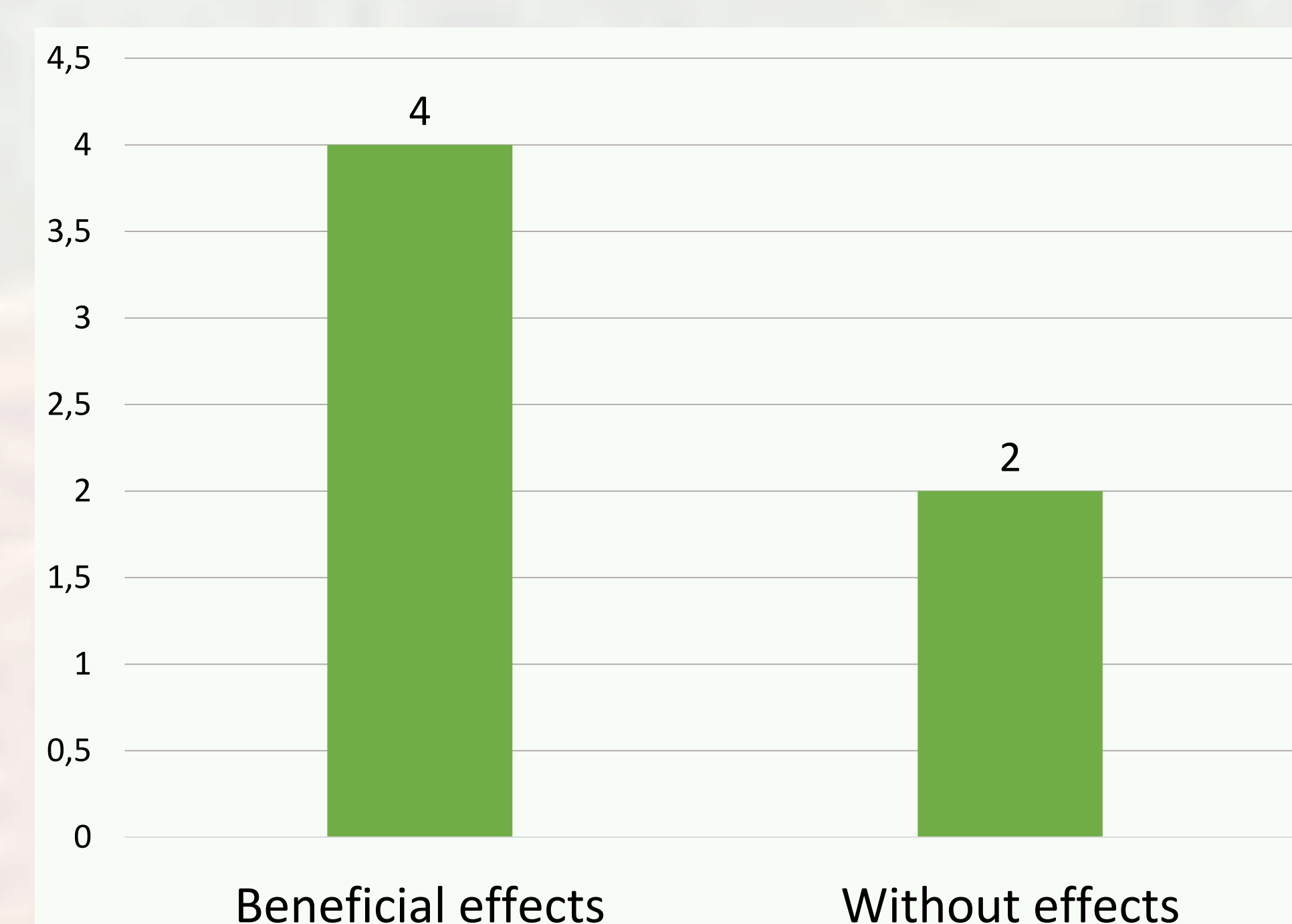


Figure 2. Studies in healthy people

Table 1. Studies used to identify if there are more beneficial or harmful effects

32 studies in total				
Healthy people (6)		Patients with cancer (26)		
Beneficial effects	Without effects	Beneficial effects	Without effects	Harmful effects
4	2	16	6	4

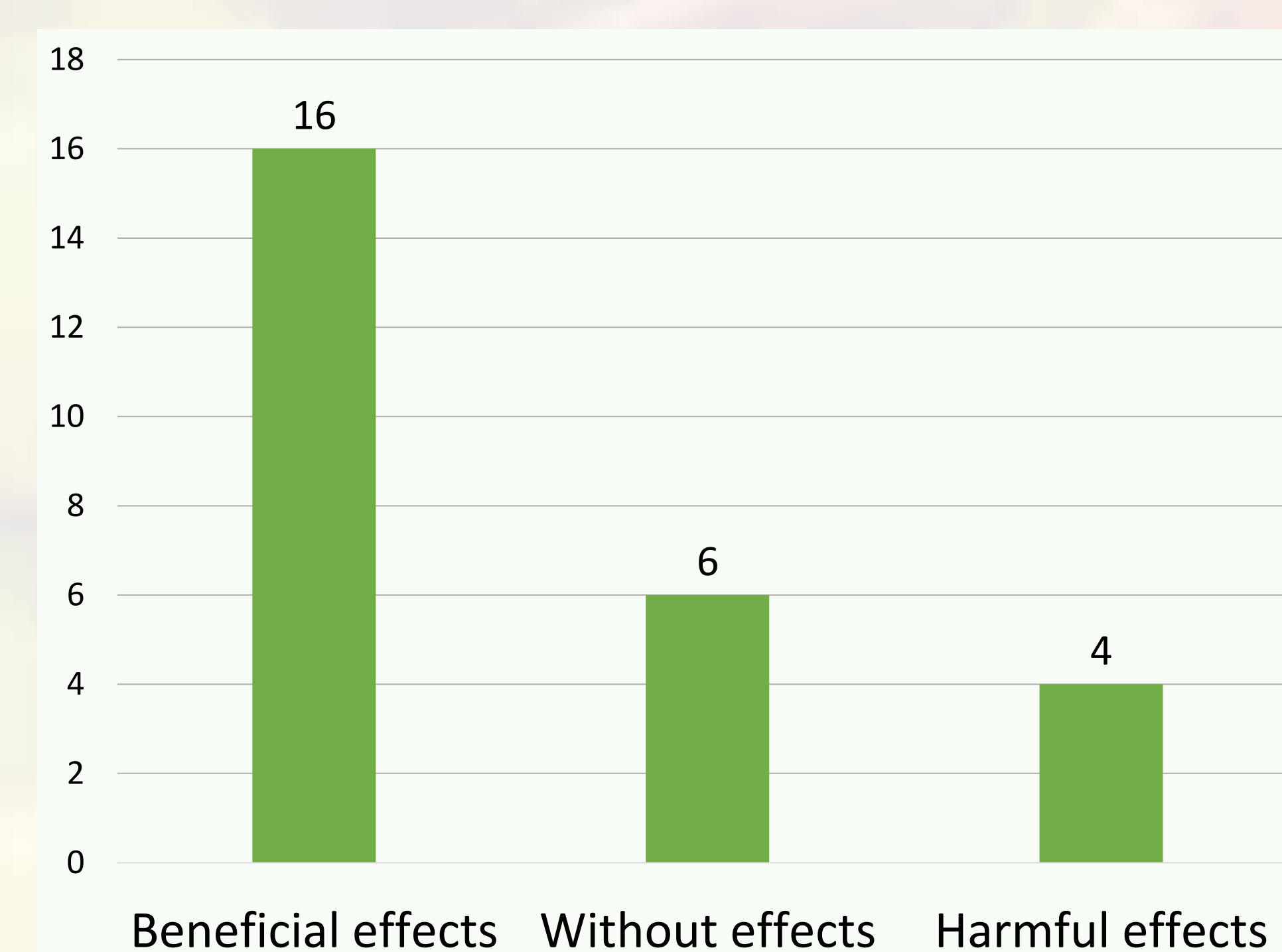


Figure 3. Studies in patients with cancer

Conclusions

1. The **cell develops** several **defence mechanisms** in contexts of **oxidative stress**. Some of these **can be improved** by taking a **diet rich in antioxidants**.
2. **Studies** that analyse the relationship between **consumption of antioxidants** and cancer **have various results**. Many of them point to **beneficial effects**, especially in the **prevention** of risk of cancer, while studies with **patients** are **more variable**, while some of them say that are beneficial, others that don't have any effect and others that are harmful.

References

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- Lin J, Zhang SM, Wu K, Willett WC, Fuchs CS, Giovannucci E. 2006. Flavonoid intake and colorectal cancer risk in men and women. *Am J Epidemiol*. 164(7):644–651. doi:10.1093/aje/kwj296.